

innovason

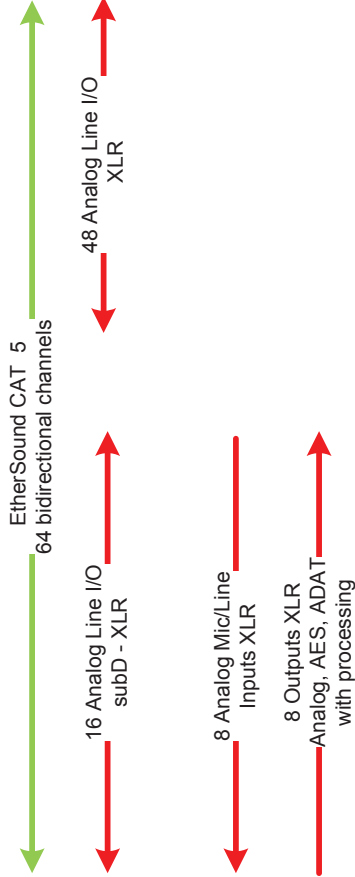
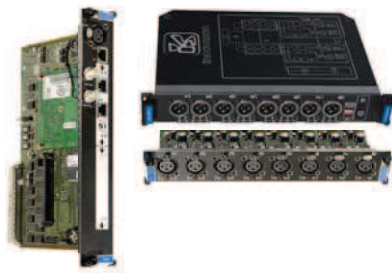
PUSH THE LIMITS.

Eclipse 72 I/O
with New SR 16

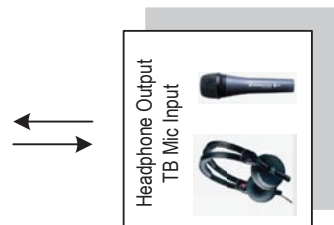
ECLIPSE

DIGITAL LIVE CONSOLE





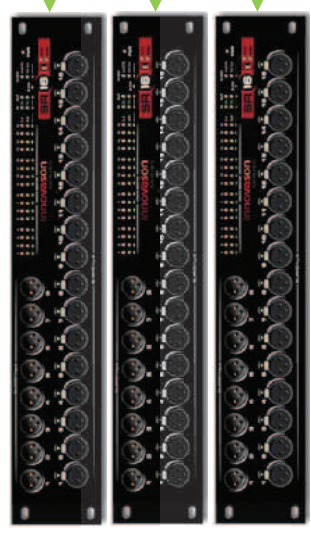
ECLIPSE



ECLIPSE

- 48 motorised "touch-sensitive" faders (100mm)
- SMART Panel with direct access to 12 additional channels and layered access to 48 channels (4 layers)
- 64 channels audio I/O via Ethersound Interface (CAT5)
- 16 Line In-/ Outputs on Sub D connectors at the rear of the console
- 8 MIC/LINE Inputs (1x SI-8D3)
- 8 Analog Line Outputs (AES, ADAT) (1x UM8 PO)
- simultaneous mixing of 104 processed inputs
- 48 freely assignable busses (Aux, Group, Master, Matrix)
- FX include: Reverb, Delay, Multiband Compressor, Flange, Chorus, Phase EQ, Expander, Compressor, Parametric EQ (2x FM 8 VB)

SR - 16



3 x STAGERACKS mini

with EtherSound port to connect rear of the console (Cat5)

- 3 19" 2U frames equipped with:
- 48 MIC/LINE Input with 24bit A/D converter
- 48 Line Outputs Analog
- 24 GPIO

①	②	③	④
12.11.2010/ mb	Eclipse 72 In / 72 out - SR 16		
innovason	SYSTEM BLOCK DIAGRAM Eclipse		

ECLIPSE FEATURES AND OPTIONS

Integrated Local Audio Rack

Integrated flexibility right from the factory – Eclipse can offer even that. The rear of the console is also a local audio rack, and offers up to 64 inputs and outputs, FX-modules, as well as 64 additional inputs and outputs via Ethersound. Moreover, Innovason plug-in modules can be used in six slots.

Stage Box

Each stage box features up to 64 inputs and outputs. The output ports are freely configurable – both analogue and digital. Furthermore, every microphone is connected to the network and can be used by all systems. LED displays on the stage box show if a signal is available, if the phantom power settings are correct, or if the input is overloaded.

Additional features:

Offline: Eclipse can be switched to Offline mode with the push of a single button. Now, each Snapshot (Page) can be prepared or modified without any effect on the current mix. This feature is a technical must for use during rehearsals in theatre work and musicals. The Eclipse shows precisely all the settings (including all faders and encoders) that were defined in Online mode. Changes made to snapshots for the current scene automation can also be recorded during runtime.

Relax: With the Relax function, any channel can be removed from the automation. That way, for example, the show host mic can be mixed without interference, while the next band snapshot is loading.

Overram: Individual parameter changes can be quickly written into already existing Snapshots (Pages). An instrument that was mixed too low can therefore be provided with a higher level during the production. This newly defined level can be subsequently entered as an offset in all snapshots.

Libraries: You can save the perfect bass drum setting in a preset. This can then be conveniently put into the library with all sound settings, and accessed in other shows.

Monitoring: A stereo bus is used for the monitoring. This can be assigned to three different outputs. Listen delays can be specified at anytime. Eclipse offers talkback on three different circuits that can be flexibly configured to all output buses.

Effects/Plug-Ins

Up to 32 effects can be used on one plug-in card:



Modulated delay and phasing

This plug-in allows different variations of Chorus, Flanger and Modulation



C-Limiter

A Brick Wall Limiter, generating a pleasing distortion for those high levels



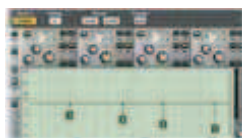
Compressor

A very efficient Compressor, with Hard or Soft curves



DeEsser / Ducker

A DeEsser with a BP and HPF filter; will be switchable to a Ducker in a forthcoming release



EQ-Pro-G8

8-band fully parametric EQ with Parametric, Shelf, Notch, HPF or LPF filter on each band



Expander

An Expander with Hard- and Soft-knee modes



GEQ-31

A complete Graphic EQ offering several dB scales



Just-Verb²

Uses the famous algorithms of the VB-Audio Aphro reverb



Stereo Phase EQ

This unique plug-in enables adjustment of phase (+/-180°) at four different frequencies



MultiTap Delay

A multitap delay allowing all variations of Echo, Ping-Pong, etc. A tap Tempo is integrated. Each tap has Level and Pan controls

DioMadiES: Ethersound to Madi Converter

Easily handles conversion from Ethersound to Madi and Madi to Ethersound. Either Madi56 or Madi64 can be used coaxially or optically, which can then be fed back into the Ethersound network.

Dio8Out: Ethersound 8 Channel Analogue Converter

A simple 8-channel digital-analogue converter that can be integrated conveniently into the Ethersound network. Even a system that cannot be linked with Ethersound directly can now be connected. Several Dio8Outs can be used in a network.

DioAv: Connecting Eclipse to the A-NET 16

Two 16-channel Aviom buses can be fed to an Eclipse via the DSP card. For example: connected via Cat5, an Aviom Personal Mixer System can be interfaced directly to an Eclipse, providing every musician with his or her individual mix.

INNOVASON HISTORY

Innovason was founded in 1993. In the following years, the company established itself as a driving force in innovation, and developed a series of groundbreaking features for professional mixing consoles. Innovason's consoles were prominent mainly in three fields of operation: tours, fixed installations and OB trucks. Predominantly active in the live market, the company counts today among the top providers of high-quality audio technology for live production. All of Innovason's systems are based on digital technology, and, due to their modular structure, are entirely compatible.

Today, Innovason focuses especially in the areas of live sound systems, theatre and musicals.

As in the past, the company's name is still our mission, as the most important innovations to date prove:

1993

Invention of the Muxipaire, the first system for digital audio transmission between stage and console using coaxial cable

1996

Introduction of the first digital mixing console for live applications

2003

Introduction of the SY series featuring the SY48 and SY80

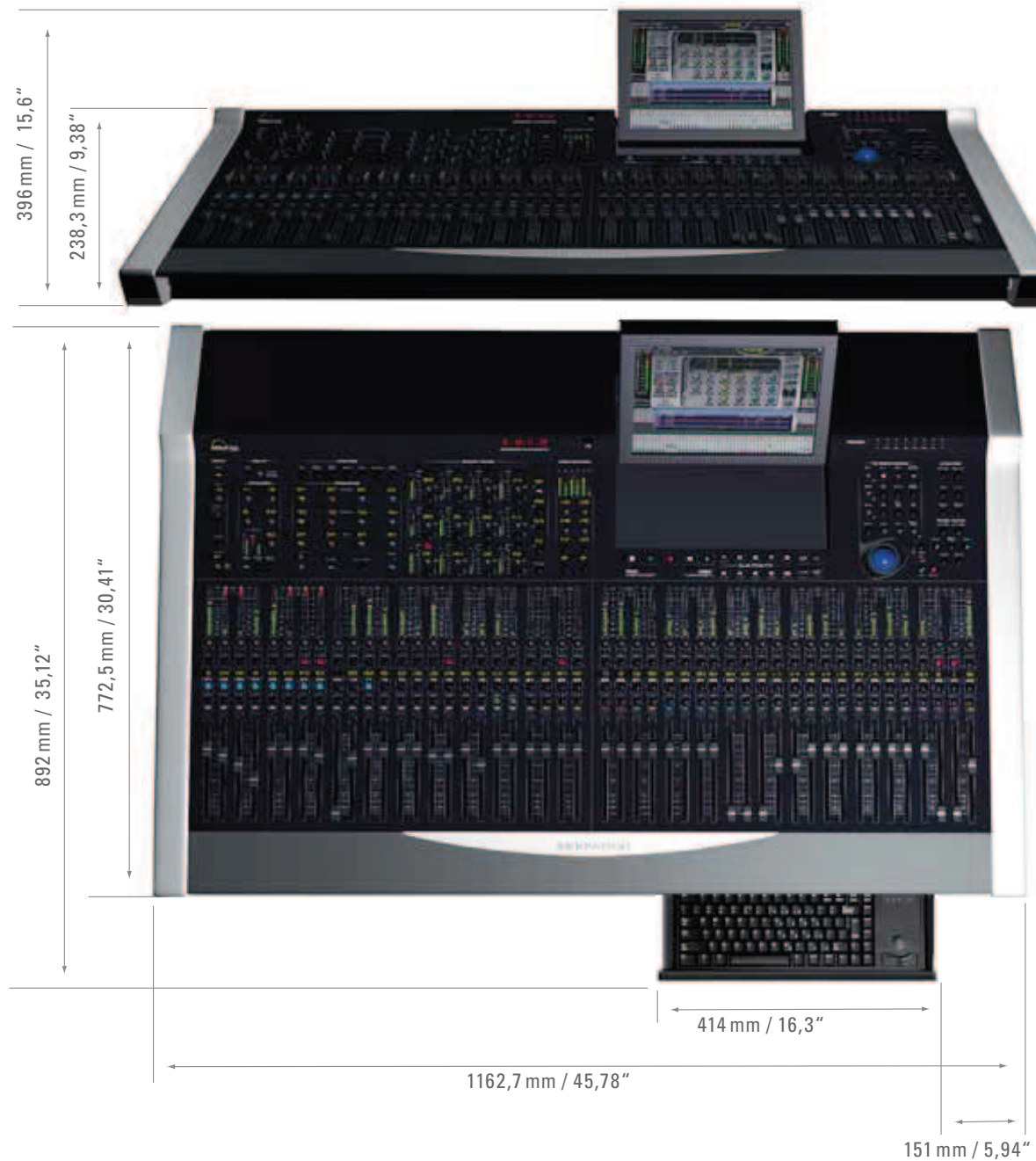
2008

Lawo AG becomes a majority shareholder
Presentation of the Eclipse at PLASA in London

2009

Presentation of M.A.R.S. at Prolight+Sound in Frankfurt

ECLIPSE TECHNICAL DATA



Product Dimensions	Dimensions (H × W × D)	Weight
Console only	15,6" × 45,78" × 30,41" / 396 × 1162,7 × 772,5 mm	99 lb / 45 kg
Console with flight case	15,15" × 49,6" × 48" / 385 × 1260 × 1220 mm	132 lb / 59,8 kg

Power supply	90 to 250 Vac, 47/63, 440 Hz (automatic switching)
Redundancy	Automatic (2 PSU)
Consumption	270 VA maximum per power supply
Temperature range	+10°C to +35°C

Audio characteristics DSP Eclipse

Internal sampling frequency	48 kHz
External sampling frequency	44 to 49 kHz / Word Clock TTL and AES
Clock jittering	5ns RMS
Calculations and internal processing	40 bits floating decimal point
Audio-digital signal path	24 bits fixed decimal point, 144 dB dynamic range
Analog signal delay	1.3 ms - Path of nominal signal: Mic Input – DSP - Analog Output
Analog bandwidth	15 Hz to 20 kHz - Microphone Input Gain @ -3 dB
Range of mic/line input	-63 to 27 dB / Gain: 64 steps of 1.5 dB
Input dynamic range	105 dB / Input Gain @ +6 dB, output @ +22 dBu
THD (+N)	- 90 dB / Input Gain @ 6 dB, output @ +22 dBu
Equivalent input noise	-127 dB (Gain 60 dB)
Noise level	-95 dBu (residual output noise) -95 dBu (one output fader @ 0 dB) -79 dBu (one output fader and one input fader @ 0 dB, gain 60 dB)

Mixing capacity DSP Eclipse

Inputs mixed simultaneously	104
Mix buses	48 + one stereo monitoring circuit
Input processing	104 / Delay – Low Cut – Phase – Gate – Compressor – PEQ
Mix buses processing	16 (assignable) / Delay – Low Cut – Phase – Gate – Compressor – PEQ
Max adjustable delay	222 ms (for inputs and inserted processing on mix buses)
Talk Back	One dedicated Mic Input
Digital interfaces	Two: Ethersound 64 I/O thru Cat5 link, MUXI 64 I/O thru coax cable
Patching	Patch grids allowing 144 inputs and 144 outputs patch connections (saved with the snapshots)

Audio characteristics analog Inputs and Outputs	Mic Inp. SI-8D3	UM-8PO	Sub-D 16 Line Inputs	Sub-D 16 Outputs
Converters	24 $\Delta\Sigma$ 128	24 $\Delta\Sigma$ 128	24 $\Delta\Sigma$ 128	24 $\Delta\Sigma$ 128
Bandwidth (Hz)	15-20 k	5-22 k	5-20 k	5-20 k
Dynamic	110 dB	113 dB	105 dB	105 dB
THD (-1 dBfs)	- 95 dB	- 93 dB	- 98 dB	- 92 dB
Z in/out (Ω)	> 1,7 k	< 200	> 10 k	< 200
Connectors	XLR3	XLR3	DB25 F.	DB25 M.
LEDs	Sig., Pk, 48 V	Sig., OL, AES	-	-
Delay (@ 48 kHz)	0,827 ms	0,687 ms	0,499 ms	0,499 ms
Full Scale	12 dBu (@ 0dB)	11 to 22 dBu	22 dBu	22 dBu

Audio characteristics digital Inputs and Outputs	DI-8S	DI-8Src	UM-8PO
Bits	24	24	24
Bandwidth (Hz)	0-22 k	0-22 k	0-22 k
Dynamic	144 dB	144 dB	144 dB
Range (dBfs)	-6/+6 dB	-6/+6 dB	-12/0 dB
Distortion	-138 dB	-122 dB	-138 dB
Z in/out (Ω)	110	110	110
Connectors	XLR3	XLR3	XLR3/Toslink (ADAT)
LEDs	-	-	Sig., OL, AES
Delay (@ 48 kHz)	0,062 ms	0,8 ms	0,146 ms

Output processing UM-8PO (each output benefits of a complete DSP treatment)

Delay (up to 1360 ms) – Phase – PEQ – 31 band GEQ – Compressor – Gate – Output Gain